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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/490,038	01/24/2000	Taro Takahashi	US000034	6624

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EXAMINER
OH, TAYLOR V

ART UNIT	PAPER NUMBER
1623	

DATE MAILED: 02/13/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/490,038	Applicant(s) Takahasi et al
	Examiner Oh Taylor Victor	Art Unit 1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Nov 27, 2001*.

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-7 and 11* is/are pending in the application.

4a) Of the above, claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☐ Claim(s) _____ is/are rejected.

7) ☒ Claim(s) *1-7 and 11* is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

15) ☐ Notice of References Cited (PTO-892)
16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
18) ☐ Interview Summary (PTO-413) Paper No(s). _____
19) ☐ Notice of Informal Patent Application (PTO-152)
20) ☐ Other:

Final Rejection

The Status of Claims

Claims 1-7 and 11 have been rejected.

Claim Objection

The objection of claims 6-7 and 11 has been withdrawn due to the modification made in the amendment.

Claim Rejections-35 USC 102

The rejection of claims 1, 3-4, and 6-7 under 35 U.S.C. 102(b) as being anticipated clearly by Van Pottelsberghe dela Potterie (U.S. 3,716,380) and the rejection of claim 11 under 35 U.S.C. 102(b) as being anticipated clearly by Madsen et al (U.S. 5,189,016) have been changed to the rejection of claims 1, 3-4, 6-7, and 11 under 35 U.S.C. 103(a) as being unpatentable over Van Pottelsberghe dela Potterie (U.S. 3,716,380).

Claim Rejections-35 USC 103

2. Applicants' argument filed 11-27-2001 have been fully considered but they are not persuasive.

Rejection of claims 1, 2, and 5 under 35 U.S.C. 103(a) as being unpatentable over Heins et al (U.S. 4,032,676).

The rejection of Claims 1, 2 and 5 under 35 U.S.C. 103(a) as being unpatentable over Heins et al (U.S. 4,032,676) is maintained for the reasons of the record in paper no. 6.

Claim Rejections - 35 USC § 103

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1 , 3-4, 6-7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Van Pottelsberghe dela Potterie (U.S. 3,716,380).

Van Pottelsberghe dela Potterie discloses a method of making flavoring substances by reacting a protein hydrolysate containing soy protein, palmitic acid, methionine, lactic acid , water, xylose, and etc. at a temperature of 100^0 C. (See col. 3 , Example 2). In addition, a mixture of mono and polysaccharides may be used as starting material (See col. 1 , lines 57-58).

However, the instant invention differs from Van Pottelsberghe dela Potterie in that the process is carried out at a temperature greater than 100^0 in a high-pressure withstanding container .

Concerning the process being carried out at a temperature greater than 100^0 in the high-pressure withstanding container, the claimed ranges and prior art do not overlap, but are close enough that one skilled in the art would have expected them to have a similar reaction condition in the absence of unexpected results. Furthermore, the limitation of a process with respect to ranges of pH, time and temperature does not impart patentability to a process when such values are those which would be determined by one of ordinary skill in the art in achieving optimum operation of the process. Temperature is well understood by those of ordinary skill in the art to be a result-effective variable especially when attempting to control selectivity of a chemical process. Also, regarding to the use of the high-pressure withstanding container, it is related to a mechanical expediency, not to the novelty of the invention. If the skillful artisan in the art had desired to make satisfactory flavoring substances in the fully isolated container for the purpose of

capturing all the flavors during the reaction process, it would have been obvious for the skillful artisan in the art to have used that type of the container in the process.

Therefore, if the skillful artisan in the art had desired to control selectivity of a chemical process related to the manufacturing carboxylic acids and amino acid condensates, it would have been obvious for the skillful artisan in the art to have obtained the claimed temperature range from routinely experimenting Van Pottelsberghe dela Potterie's temperature parameter during the process.

Response to Argument

6. The applicants argue the following issues:

   1. The Potterie patent and the Madsen patent have failed to suggest claims 1 and 7; namely , the reaction between carboxylic acids and amino acids takes place at a temperature higher than 100^0 C. in the high-pressure withstanding container,
   2. The Heins patent have failed to suggest the use of an aqueous system at a temperature higher than 100^0 C.

The applicants' argument have been noted, but these arguments are not persuasive.

First of all, with regard to the failure of the Potterie patent and the Madsen patent to suggest the reaction between carboxylic acids and amino acids at a temperature higher than 100^0 C. in the high-pressure withstanding container, the Examiner has noted the argument. However, the Potterie does teach the method of making flavoring substances by reacting a protein hydrolysate containing soy protein, palmitic acid, methionine, lactic acid , water, xylose, and etc. at a temperature of 100^0 C. (See col. 3 , Example 2); furthermore, soy protein is made up of a lot of amino acids. Concerning the process being carried out at a temperature greater than 100^0 in the high-pressure withstanding container, the claimed ranges and prior art do not overlap, but are close enough that one skilled in the art would have expected them to have a similar reaction condition in the absence of unexpected results. Furthermore, the limitation of a process with respect to ranges of pH, time and temperature does not impart patentability to a process when such values are those which would be determined by one of ordinary skill in the art in achieving optimum operation of the process. Temperature is well understood by those of ordinary skill in the art to be a result-effective variable especially when attempting to control selectivity of a chemical process. Also, regarding to the use of the high-pressure withstanding container, it is related to a mechanical expediency, not to the novelty of the invention. If the skillful artisan in the art had desired to make satisfactory flavoring substances in the fully isolated container for the purpose of capturing all the flavors during the reaction process, it would have been obvious for the skillful artisan in the art to have used that type of the container in the process.

Secondly, regarding to the Heins patent's failure to suggest the use of an aqueous system at a temperature higher than 100^0 C., the Examiner has noted the argument. However, Heins et al does teach a method of making N-polyhydroxyalkylamino acids by reacting uronic acids in alcohols, ethers or their mixtures with water in the presence of amino acids at a temperature between 50^0 to 100^0 C.(See col. 3 ,lines 58-65); the Heins patent does show the use of an aqueous system along with methanol from Example 1 (see col. 6 , lines 11-14). Concerning the process being carried out at a temperature greater than 100^0 in the high-pressure withstanding container, the claimed ranges and prior art do not overlap, but are close enough that one skilled in the art would have expected them to have a similar reaction condition in the absence of unexpected results. Furthermore, the limitation of a process with respect to ranges of pH, time and temperature does not impart patentability to a process when such values are those which would be determined by one of ordinary skill in the art in achieving optimum operation of the process. Temperature is well understood by those of ordinary skill in the art to be a result-effective variable especially when attempting to control selectivity of a chemical process.

Therefore, the Examiner maintains the rejection of all the claims

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to T. Victor Oh whose telephone number is (703) 305-0809. The examiner can normally be reached on Monday through Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Geist , can be reached on (703) 308-1701. The fax phone number for the organization where this application or proceeding is assigned is (703) 308-4556.

T. Victor Oh

2/9/02

PAUL J. KILLOS
PRIMARY EXAMINER